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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/578,907 Confirmation No. 3247  
Applicant(s) : Friedrich BOECKING  
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Customer No. : 02119

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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**INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97(b),  
AND EXPLANATION OF THE RELEVANCE OF THE CITED PRIOR ART**

Sir:

The undersigned hereby requests that the prior art cited on the attached prior art statement be placed of record in the application file and be considered by the examiner.

This citation of prior art is made under 37 CFR 1.97(b), since it is being filed before the mailing of the first Office Action.

The relevance of the prior art cited on the attached form PTO/SB/08a is as follows:

**JP 11-30122**

The purpose of this invention is to make the whole four-cycle engine into a compact structure as well as to make a connecting structure between an exhaust passage formed on a cylinder head and a muffler into a compact structure. In a four-cycle engine, an intake valve and an exhaust valve are arranged along the axial direction of a crankshaft, and an exhaust passage 17 extending along the axial direction of the crankshaft is formed on a cylinder head. A main muffler 25 is arranged in the position approximately perpendicular to the axial direction of the crankshaft, an auxiliary muffler 26 is connected to the tip of the exhaust passage 17, a connecting pipe 28 is extended from the auxiliary muffler 26 in the direction approximately perpendicular to the exhaust passage 17, and the tip of the connecting pipe 28 is connected to the main muffler 25. The connecting pipe 28 to be piped between the exhaust pipe 17 and the main muffler 25 can be piped without being extended outward. Therefore, the connecting structure between the exhaust passage 17 and the main muffler 25 is made into a compact structure, moreover, the whole four-cycle engine is formed into a compact structure.

**JP 2002-525487**

The invention relates to a fuel injection valve (1), more particularly, an injection valve for fuel injection systems in internal combustion engines. Said valve comprises piezoelectric or magnetostrictive actuator (3). Said actuator (3) actuates a valve closing body (26) by means of a valve needle (30) and interacts with a valve seat surface (24) to form a sealing seat. The actuator (3) can be actuated in a first direction of movement (39) while the valve closing body (26) can be moved by the needle (30) in a second direction (40) substantially perpendicular to the first direction of movement (39).

**JP 2003-065179**

The purpose of this invention is to provide a spring sleeve which can be formed as a hollow cylindrical body having good roundness and requires only a small structural space. The spring sleeve 8 is formed as an integrated deep drawn part, and at least the hollow cylindrical integrated deep drawn part is provided with a plurality of cutouts distributed over a circumference and a total length.

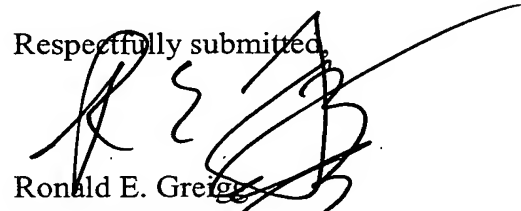
**JP 2003-293910**

The purpose of this invention is to provide a piezo type fuel injection device wherein driving energy of a piezoelectric oscillator is reduced, and a lift generating force and a lift amount of a valve member are secured. Respective outer diameters of an extended diameter part 33 of the valve member 16 having a needle shape having a circular cross section and a cylindrical auxiliary piston 19 are set smaller than the outer diameter of a columnar main piston 18. When the main piston 18 reduces fluid pressure of back pressure chambers 37, 40, and 50 with contraction of the piezoelectric oscillator 17 and hence the valve member 16 in an nozzle hole blocked state is lifted in the nozzle hole opening direction B of a nozzle hole 30, the auxiliary piston 19 supported on the outer periphery of the extended diameter part 33

moves by a predetermined distance integrally with the extended diameter part 33 and then stops to allow relative movement of the extended diameter part 33.

Examination of this application is respectfully requested.

Respectfully submitted,



Ronald E. Greigg

Registration No. 31,517

Attorney for Applicant(s)

Customer No. 02119

GREIGG & GREIGG, P.L.L.C.  
1423 Powhatan Street  
Unit One Station Square  
Alexandria, VA 22314

Telephone: 703-838-5500  
Facsimile: 703-838-5554

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Enclosures  
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